Review Article

Tooth Retention through Endodontic Microsurgery or Tooth Replacement Using Single Implants: A Systematic Review of Treatment Outcomes
Mahmoud Torabinejad, Maria Landaez, Marites Milan, Chun Xiao Sun, Jeffrey Henkin, Aladdin Al-Ardah, Mathew Kattadiyil, Khaled Bahjri, Salem Dehom, Elisa Cortez, Shane N. White

CONSORT Randomized Clinical Trial

A Randomized Controlled Study of the Use of ProRoot Mineral Trioxide Aggregate and Endocem as Direct Pulp Capping Materials
Minju Song, Minji Kang, Hyeon-Cheol Kim, Eui-seong Kim

Evaluation of the Gow-Gates and Vazirani-Akinosi Techniques in Patients with Symptomatic Irreversible Pulpitis: A Prospective Randomized Study
Vivian Click, Melissa Drum, Al Reader, John Nusstein, Mike Beck

Clinical Research

Periapical Microsurgery: The Effect of Root Dentinal Defects on Short- and Long-term Outcome
Peter Z. Tawil, Veeral M. Saraiya, Johnah C. Galicia, Derek J. Duggan

Middle Mesial Canals in Mandibular Molars: Incidence and Related Factors
Ali Nosrat, Raney J. Deschenes, Patricia A. Tordik, M. Lamar Hicks, Ashraf F. Fouad

Effect of Sodium Bicarbonate–buffered Lidocaine on the Success of Inferior Alveolar Nerve Block for Teeth with Symptomatic Irreversible Pulpitis: A Prospective, Randomized Double-blind Study
Masoud Saatchi, Abbasali Khademi, Badri Baghaei, Hamid Noormohammadi

Efficacy of Platelet-rich Plasma as a Scaffold in Regenerative Endodontic Treatment
Tugba Bezgin, Ayca Dilara Yilmaz, Burcu Nihan Celik, Mehmet Eray Kolsuz, Hayriye Sonmez

Basic Research

Biology

Effects of Alendronate on Osteoclast Formation and Activity In Vitro
Caroline A. Martins, Gabriele Leyhausen, Joachim Volk, Werner Geurtsen

Mechanical Changes in Human Dental Pulp Stem Cells during Early Odontogenic Differentiation
Taneka D. Jones, Hamed Naimipour, Shan Sun, Michael Cho, Satish B. Alapati

In Vitro Cytotoxicity of Calcium Silicate–containing Endodontic Sealers
Hui-min Zhou, Tian-feng Du, Ya Shen, Zhe-jun Wang, Yu-feng Zheng, Markus Haapasalo

Evaluation of Bone Tissue Response to a Sealer Containing Mineral Trioxide Aggregate
Eloisa Assmann, Daiana Elisabeth Böttcher, Carolina Bender Hoppe, Fabiana Soares Grecca, Patricia Maria Poli Kopper

Technology

Behavior of Nickel-Titanium Instruments Manufactured with Different Thermal Treatments
Érika Sales Joviano Pereira, Ana Cecília Diniz Viana, Vicente Tadeu Lopes Buono, Ove A. Peters, Maria Guiomar de Azevedo Bahia

Sealers and Warm Gutta-percha Obturation Techniques
Josette Camilleri

Thermoplastic Properties of Endodontic Gutta-percha: A Thermographic In Vitro Study
Benjamín Briseño Marroquin, Thomas Gerhard Wolf, Dennis Schürger, Brita Willershausen

Comparison of Different Dentin Pretreatment Protocols on the Bond Strength of Glass Fiber Post Using Self-etching Adhesive
Frederico C. Martinho, Claudio Antonio Talge Carvalho, Luciane D. Oliveira, Ana Júlia Farias de Lacerda, Ana Cláudia Carvalho Xavier, Marina Gullo Augusto, Rayssa Ferreira Zanatta, Cesar Rogerio Pucci

Effect of Additives on Mineral Trioxide Aggregate Setting Reaction Product Formation

Angela M. Zapf, Sharath C.V. Chedella, David W. Berzins

Effect of EDTA Preparations on Rotary Root Canal Instrumentation

Evan R. Whitbeck, Kelli Swenson, Patricia A. Tordik, Shayne A. Kondor, Terry D. Webb, Jirun Sun

Efficacy of 3 Different Irrigation Systems on Removal of Calcium Hydroxide from the Root Canal: A Scanning Electron Microscopic Study

Sami Alturaiki, Hebah Lamphon, Hadeel Edrees, Michael Ahlquist

Fitness of Gutta-percha Cones in Curved Root Canals Prepared with Reciprocating Files Correlated with Tug-back Sensation

Heeyoung Yoon, Seung-Ho Baek, Kee-Yeon Kum, Hyeon-Cheol Kim, Young-Mi Moon, Denny Y. Fang, WooCheol Lee

Application of Resin Adhesive on the Surface of a Silanized Glass Fiber–reinforced Post and Its Effect on the Retention to Root Dentin

Fernanda Weingartner Machado, Mayara Bossardi, Tatiana dos Santos Ramos, Lisia Lorea Valente, Eliseu Aldrighi Münchow, Evandro Piva

In Situ Assessment of the Setting of Tricalcium Silicate–based Sealers Using a Dentin Pressure Model

Maria Xuereb, Paul Vella, Denis Damidot, Charles V. Sammut, Josette Camilleri

Case Report/Clinical Techniques

Implications of Endodontic-related Sinus Aspergillosis in a Patient Treated by Infliximab: A Case Report

Maud Guivarch, Ugo Ordioni, Jean-Hugues Catherine, Fabrice Campana, Jean Camps, Frédéric Bukiet

A Novel Treatment for Propagated Crown Fractures

Philip L. Michaelson